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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,773	08/18/2000	Kenneth R. Goguen	07072-938001	7321

7590

04/18/2002

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EXAMINER

TSAI, CAROL S W

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 04/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/641,773

Applicant(s)

GOGUEN ET AL.

Examiner

Carol S Tsai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Reference No. "900" at page 12, line 9.

Reference No. "902" at page 12, line 12.

The informal drawings, such as Figs. 8A-9O, are not of sufficient quality to permit examination. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Reference No. "112" in Fig. 5.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 5,953,686 to Hale et al. in view of JP 08241227 to Voigt et al.

With respect to claims 1-3, Hale et al. disclose a method for measuring system performance in a mass storage system, the storage system having a plurality of disk drive storage elements controlled by a disk drive controller, the controller receiving commands and data from and returning at least data to a plurality of host computers, the method comprising executing at at least one host computer a test request by sending commands to the mass storage system (see Abstract, lines 13-17; col. 1, lines 65 to col. 2, line 3; col. 3, lines 37-59; col. 5, lines 26-44; and col. 6, lines 55-57), accumulating, at least the executing host computer, data regarding performance of the mass storage system, in response to the requests sent by the host computer (see Abstract, lines 17-23; col. Col. 2, lines 3-8; col. 3, line 60 to col. 4, line 43; and col. 6, lines 61-63).

Hale et al. do not disclose processing the accumulated data, regarding the performance of the mass storage system in response to the host generated commands, the processing comprising validating and correcting, as required, the accumulated data.

Voigt et al. teach processing the accumulated data, regarding the performance of the mass storage system in response to the host generated commands, the processing comprising validating and correcting, as required, the accumulated data (see Abstract, lines 1-7; solution, lines 1-11; and blocks 0023-0033).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hale et al.'s method to include processing the accumulated data,

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regarding the performance of the mass storage system in response to the host generated commands, the processing comprising validating and correcting, as required, the accumulated data, as taught by Voigt et al., in order to improve the performance of the data storage system.

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hale et al. in view of Voigt et al. as applied to claims 1 and 2 above, and further in view of U. S. Patent No. 4,633,471 to Perera et al.

As noted above, with respect to claims 4 and 5, Hale et al. in combination with Voigt et al. teach all the features of the claimed invention, but do not disclose flagging any inconsistencies based upon expected results, and storing the flagged data in a system database.

Perera et al. teach flagging any inconsistencies based upon expected results, and storing the flagged data in a system database (see col. 13, lines 15-34; col. 14, lines 32-61; and col. 18, line 46 to col. 19, line 44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hale et al. in combination with Voigt et al.'s method to include flagging any inconsistencies based upon expected results, and storing the flagged data in a system database, as taught by Perera et al., in order that erroneous data can be retrieved for comparison to provide the necessary data for carrying out steps of the error correcting process.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chong, Jr. discloses several embodiments of a computer system which achieve separation of control and data paths during data transfer operations, thus allowing independent scalability of storage system performance factors (e.g., storage system ops and data transfer rate).

Bates, Jr. Et al. disclose a data storage system a number of records being prefetched from large volume storage devices for transfer to a cache in order to return requested records to a host computer in response to a read request from the host computer.

Ohmura et al. disclose input/output control apparatus managing cache memory utilizing a spare hash table for operations if first hash table enters a synonym state.

Vishlitzky et al. disclose a cache management system and method monitoring and controlling the contents of cache memory coupled to at least one longer term data storage device.

Loechel et al. disclose a method and device for writing blocks from a client to a storage device.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. Tsai whose telephone number is (703) 305-0851. The examiner can normally be reached on Monday-Friday from 7:30 AM to 4:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703) 308-1677. The fax number for TC 2800 is (703) 308-7382. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2800 receptionist whose telephone number is (703) 308-1782.

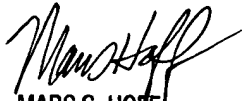
In order to reduce pendency and avoid potential delays, Group 2800 is encouraging FAXing of responses to Office actions directly into the Group at (703) 308-7382. This practice

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may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2800 will be promptly forwarded to the examiner.

Carol S. Tsai

04/11/02


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800